4:Grajdanzev--73-74 S-4 (no date) 1942 Formosans-1-3
116, 162, 463, 472

"Industry has expanded relatively rapidly, but even in 1935 there were only 67,255 workers in industrial enterprises employing more than four workers each or having a prime-mover. Nevertheless, according to the current official statistics which follow, 'agricultural population' of Taiwan formed only about fifty per cent of the population in 1938.

Changes in Agricultural Population in Taiwan

	1935	1937	1938
Total families (1,000)	897.6	...	...
Families occupied in agriculture (1,000)	419.9	427.4	...
Agricultural families as % of total	46.7	...	...
Total population (1,000)	5,212.4	5,609.0	5,747.0
'Agricultural population' (1,000)	2,790.3	2,880.4	2,896.4
'Agricultural population' as % of total	53.6	51.3	50.4

As early as 1935, according to this table, the families occupied in agriculture made up only 46.7 per cent of the total, while the agricultural population made up 56.3 per cent in that year and only 50.4 per cent in 1938. According to the census statistics, in the 25 years between 1905 and 1930 the Chinese population occupied in agriculture fell

only from 75.5 per cent to 73 per cent of the total Chinese population, while the current statistics show a fall of 3.2 per cent (of the total population) in three years. Even before 1935 the number of [74] agricultural families showed a definite lag as compared with the growth of total population, as may be seen from the following table.

Comparison of Changes in Total Population and in Agricultural Families in Taiwan*

Year	Total population (1,000)	Index of growth	Year	Agricultural families (1,000)	Index of growth
1905	3,039.8	100	1903	383.1	100
1925	3,993.4	131	1924	390.2	102
1930	4,592.5	151	1929	407.7	106
1935	5,212.4	171	1935	419.9	109
1937	5,609.0	185	1937	427.4	111
1938	5,747.0	189	1938	424.5	111

*The years given for each category do not always coincide because of absence of data: we have taken the years for which the information could be found.

In thirty-three years the population of Taiwan increased by eighty-nine per cent while on the basis of these figures the number of families engaged in agriculture, increased

by only eleven per cent. Such changes are of course quite possible. The agricultural population might send its 'surplus' to cities, where they may find employment in industry, commerce, public services and so on. But as was mentioned already, the number of workers in industry was very small in 1935 and there is no indication that it has increased considerably in the last three or four years. The difference between sixty-five and fifty per cent is, in absolute numbers, about 900,000 persons, or between 500,000 and 550,000 gainfully employed persons--quite a considerable figure for even a great country."

4:Grajdanzev--94-96 S-4 (no date) 1942 Formosans-1-3
116, 454, 471, 472, 473

"Finally, we may compare these industries from the point of view of the amount of capital invested in them: (1) [95]

1. Only paid-up capital is included because data for the reserves of smaller corporations could not be found.

Capital Invested in Taiwan's Industry in 1937
(million yen)

	Corporations	Limited partnership	Unlimited partnership	Total
Textile industry	2.7	0.1	0.1	2.9
Machine	3.9	0.9	0.1	4.9
Ceramics	3.3	0.2	0.1	3.6
Chemical	9.6	0.3	0.2	10.1
Lumber	1.5	1.1	0.1	2.7
Food	113.1	4.6	0.4	118.1
Printing	0.5	0.1	...	0.6
Gas and Electricity	47.0	...	...	47.0
Others	1.0	0.3	0.3	1.6
Total	182.6	7.6	1.3	191.5*

Footnote on next page.

* The official estimate of the total capital of industry on Dec. 31, 1937, was ¥258.5 million but it is not clear whether this figure includes nominal capital or only paid-up capital and, whether it includes other investments, government enterprises etc.

Source: Taiwan Jijo, 1939.

Again the food industry is in first place. Actually its position is much more important because it has accumulated considerable reserves. Next in importance is gas and electricity because here investments play a greater part than the number of men occupied while ceramics and printing are poor in capital. It may be of interest to compare the average investment per enterprise for the same year:

Paid -Up Capital per Business Unit
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Textile	671	60	120	477
Machine	353	38	45	123
Ceramics	276	21	33	155
Chemical	387	37	115	289
Lumber	163	93	23	106
Food	1,509	78	44	832

Paid-Up Capital per Business Unit Cont.
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Printing	101	12	...	41
Gas and electricity	7,836	10	...	6,718
Others	76	13	68	38
All industry	1,127	51	54	578

[96] We see from this table that in Taiwan there are very large enterprises in the electric power, food, and textile industries, where capital per enterprise is relatively large, while enterprises in the printing, machine, lumber, ceramics and 'other' industries are very small in size. It should be pointed out that individual enterprises are not included here, (2) but both their capital and the value of their products are insignificant

2. The number of individual enterprises in 1934 were reported as follows: 62 in textiles, 91 in metals, 173 in machinery, 588 in ceramics, 428 in chemicals, 3,960 in foods, 256 in lumber, 126 in printing and 381 in others, a total of 6,065, almost all of them Chinese (Takahashi, op. cit., p. 438).

in comparison with those of the companies."

4:Grajdanzev--107 S-4 (no date) 1942 Formosans
116, 315, 472

"There are also five companies engaged in gas utilization with capital above ¥500,000 each—Taiwan Gas, Tokokogyo, Taiwan Denka, Taiwan Kagaku, (chemicals) and Taiwan Menka (cotton), but it is not clear whether their capital is included in the ¥46.6 million mentioned above."

4:Grajdanzev--117 S-4 (no date) 1942 Formosans
116, 465, 472, 511, 563

"We saw previously that the development of modern industry in Taiwan did not benefit the Chinese as entrepreneurs. Now it becomes evident that it brought very little to them as workers. If we use Engel's ratio of sixty per cent as an estimate of the share of wages spent on food in low-wage countries, it appears that the wages of the unskilled worker in Taiwan can purchase about one pound of rice per day for each member of his family."

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

472 While the government was restoring and expanding the basic industries and services such as electric power, transportation, chemical fertilizer, and petroleum products, the growth of private industries has been no less remarkable. The number of factories increased from 7,474 in 1950 to 12,439 in 1953.

45:Stanford U. S-4, 5 1956 ADI Formosa
~~ADI~~ ADI

472 The increase from 1950 to 1953 was, for
483 the most part, in private industries, manufactur-
178 ing consumer articles, including textiles, soap, rubber goods, paints, matches, drugs, aluminum wares, bicycles, electric fans, and sewing machines. Among these, textiles, soap, and rubber goods have increased production most rapidly. Producing only 12 per cent of the textiles consumed locally in 1935, Formosa is now in a position now only to meet the expanding requirement of a growing population, but also to provide a substantial amount of cotton cloth for export. Except for automobile tires, nearly all the rubber goods needed on the island are manufactured locally. In 1939, the year of record soap production under the Japanese, 214,830 cases (5,115 metric tons) of laundry soap were produced. Today there are one government and ninety-three private producers, and the total production capacity of laundry soap is 125,000 cases (2,500 metric tons) per month.[9]

The rapid growth of private industries is attributed to the following factors:

1. Formosa has many basic raw materials, coal, salt, limestone, sulphur, ceramic clay,

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9. Economic Data Book, Part II, Vol. III, preopared by FOA Mission to China, Taipei, March 1955, p. 99.

timber, and is also rich in oil and a favorable climate.

2. It has abundant power and good means of communication.

3. A great deal of dismantled equipment has been imported from the Mainland.

4. As a result of the massexodus from the Mainland, Formosa has many trained personnel

5. Labor supply with experience of mechanical operations is plentiful.

It should be noted, however, that 90 per cent of the private factories are of very small size, operated by a single owner. More than half have less than 5 hired workers, one-sixth from 6 to 10, and a fifth from 11 to 30 workers. Ninety-five per cent have capital of less than NT $50,000 (US $3,000). Twenty-six per cent depend entirely on manual labor, 67 per cent use a motor under 15 horsepower, and only 7 per cent use motors of 15 horsepower or more.[10] On the other hand, the government

10. Arthur F. Raper and others, Urban and Industrial Taiwan, Crowded and Resourceful, published by FOA/MSM to China and National Taiwan University, Taipei, 1954, pp. 122-23.

472 factories, though much fewer in number
471 (2.1% of the total), are far larger than the private enterprises. The contrast in size of government-owned and private factories is indicated by the value of their products, as shown in the table below.

45:Stanford U, S-4, 5 1956 AD1 Formosa
AD1

Table 4. Approximate Percentage Distribution of Value of Major Industrial Products from Government and from Private Factories, Enterprises, and Mines on Formosa, 1953*

Type of Production	Government Enterprises	Private Enterprises	Total Value of Industrial Production
Percentage distribution of value of all industrial production	65%	35%	100%
Sugar and by products	98	2	18
Transportation	86	14	13
Textiles	37	63	10
Mining	15	85	7
Alcoholic beverages and tobacco	100	-	6
Metal Products	16	84	6
Edible oil	3	97	6
Timber	52	48	6
Petroleum products	100	-	5

45:Stanford U. S-4, 5 1956 AD1 Formosa
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(continued)			
Rubber goods	6	94	4
Electric power	100	-	4
Fertilizer	100	-	4
Machinery	24	76	3
Cement	100	-	2
Paper	61	39	2
Chemicals	82	18	1
Canned pineapples	62	38	1
Salt production	100	-	#
All others	53	47	2

* Raper and others, ibid., p. 118.
\# Less than 1 per cent.

the transfer transactions are completed, the government will still control 60 per cent of the total value of industrial output.

Another adverse factor affecting the development of private enterprise is the multiplicity of government controls. The prices of coal, cement, fertilizer, and many other goods are regulated by the government. "The government also operates a supply bureau, through which small private manufacturers secure much of their imported raw materials. Banks, foreign exchange, and import and export licenses are controlled by the government; the sale of exports is permitted by the government only at prices above fixed floor prices."[15] In the field of taxation, inequities are widely reported. The discrimination in favor of public enterprises and the vexatious government controls seriously hamper the growth of private industry. Formosa is emerging from a colonial economy into a self-sufficient economic unit. The need for the production of goods and services is tremendous. The creation of new employment opportunities is also imperative on account of the enormous increase in population in recent years. In future industrial expansion, private enterprise

15. Raper, op. cit., p. 10.

must contribute a major share. The Chinese government has promulgated regulations to attract capital investment by overseas Chinese and foreign nationals, but the result will not be encouraging until a healthy environment in favor of private investment is first created. To foster the growth of private industries the following conditions appear to be essential: (a) a relatively stable price level and reasonably cheap credit; (b)tax obligations must be clearly defined, and no price controls imposed abruptly and arbitrarily; (c) economic control should be reduced to a minimum; (d) and the virtual government monopoly in foreign trade should be modified to allow private initiative to find an outlet for surplus products. When a more favorable climate is created to insure the success of private capital, private industry will overtake public enterprises and assume an important role in the industrial revolution that is under way in Formosa.

249 defeated the Dutch, annual production rose to
433 18,000 metric tons, a large part of which was ex-
439 ported to the Philippines and to Japan. In 1870, total production amounted to 73,000 metric tons; 63,7000 metric tons were exported. During the Japanese occupation of Formosa, the island's sugar industry was developed to supply the require-
257 ments of Japan proper. Four Japanese companies
433 controlled Formosa' sugar industry. During the
471 1930's, 42 mills able to process a total of 65,000 metric tons of sugar cane were in operation. The sugar syndicate owned 117 hectares of land, a railway extending 2,800 kilometers, had a staff of 5,000, employed 19,000 workers, and generated its own power. After the war, all of the mills came under the control of the government-owned Taiwan Sugar Corporation. In 1947, six mills were incorporated, bringing the total number of mills in operation to 36. At present, only 26 mills are in operation; for reasons of economy, ten mills were shut in the period 1951-52, and production goals for 1954-55 were lowered.

472 In addition to the Taiwan Sugar Corporation,
259 which is the sole producer of refined sugar, some 52 private companies belonging to the Taiwan Brown Sugar Association produce brown sugar for domestic use and foreign export.

257 The milling capacity of the 26 mills controlled
433 by the Taiwan Sugar Corporation is 49,350 metric tons of sugar cane per day; sugar recovery is about 12 per cent. These mills operate an average of 150